In re Application of: Irun R. COHEN et al
Serial No.: 10/542,591
Filed: March 14, 2006
Office Action Mailing Date: March 2, 2011

Examiner: Edward MARTELLO
Group Art Unit: 2628
Attorney Docket: **30070**
Confirmation No.: 6831

In the Claims:

1. (Currently Amended) A computer implemented method for producing animation of a system having a behavior, the method comprising:

In a first environment:

providing a reactive model of system overall behavior ; and

creating animation primitives for animating said model, using a first tool for implementing said animation primitives,

~~and a second tool for~~ implementing said reactive model of system overall behavior using a second tool, said second tool being detached from said first tool ;

and

In a runtime environment, said runtime environment being a different environment from said first environment:

detecting events associated with said system;

selecting respectively animation primitives according to said model of overall system behavior and said events; and

combining together said respective animation primitives representing said detected events; thereby to create an overall animation.

2. (Original) The method according to claim 1, wherein said plurality of events comprises a plurality of temporal samples or a plurality of scenarios.

3. (Original) The method according to claim 1, wherein said plurality of events comprises a plurality of states.

4. (Original) The method according to claim 3, further comprising: determining at least one transition between said plurality of states.

5. (Original) The method of claim 4, wherein said at least one transition is determined according to at least one rule.

6. (Previously Presented) The method of claim 3, wherein said creating said animation primitives further comprises creating animation primitives of said at least one transition.

7. (Previously Presented) The method of claim 3, wherein said state represents an interaction between a plurality of objects.

8. (Previously Presented) The method of claim 3, further comprising: interacting between a plurality of objects; and altering a state of at least one object according to said interacting.

9. (Previously Presented) The method of claim 3, further comprising: receiving an external input; and altering a state of at least one object according to said external input.

10. (Original) The method of claim 9, wherein said external input is provided through a user interface.

11. (Original) The method of claim 10, wherein said user interface is for interacting with a computer game.

12. (Previously Presented) The method of claim 3, wherein said detecting said state is performed by a state engine, and wherein said creating the animation is performed by an animation engine, the method further comprising: receiving a command from said

state engine; parsing said command to determining said state of said object; and translating said command to a format for said animation engine for creating the animation.

13. (Withdrawn) A system for producing reactive animation of an object, wherein a behavior of the object is modeled as a plurality of events, comprising: (a) an event driven engine for modeling the plurality of states and at least one transition between the plurality of events; (b) an animation engine for creating a visual depiction at least of each of the plurality of events; and (c) an interface for receiving an event associated with the object from the event driven engine, and for sending a command to said animation engine for creating said visual depiction according to said event.

14. (Withdrawn) The system according to claim 13, wherein: said event driven engine comprises a temporal logic engine or a scenario based engine; and said plurality of events comprises a plurality of time samples or a plurality of scenarios.

15. (Withdrawn) The system according to claim 13, wherein: said event driven engine comprises a state engine; and said plurality of events comprises a plurality of states.

16. (Withdrawn) The system according to claim 15, further comprising: a plurality of statecharts; and a state processor.

17. (Withdrawn) The system according to claim 13, wherein the animation engine comprises: a plurality of animation pieces; a rendering engine; and an input translator.

18. (Withdrawn) The system of claim 14, wherein said state engine comprisesRhapsody and said animation engine comprises FlashT.

19. (Withdrawn) The system according to claim 13, further comprising: (d) an external input module for sending a command to said interface for interacting with the object.

20. (Withdrawn) The system of claim 19, wherein said external input module comprises a user interface.

21. (Withdrawn) The system of claim 20, wherein the user interface operates in response to mouse clicks.

22. (Withdrawn) The system of claim 20, wherein the user interface is comprised within the animation engine.

23. (Withdrawn) The system of claim 20 wherein the user interface is operatively associated with the animation engine.

24. (Withdrawn) The system of claim 20 wherein the user interface is comprised within the interface.

25. (Withdrawn) The system of claim 20 wherein the user interface is operatively associated with the interface.

26. (Withdrawn) A method for analyzing a biological system, the biological system featuring a plurality of biological components, the method comprising: providing data related to a plurality of activities of the plurality of biological components of the biological system; analyzing the data to form at least one specification; constructing a plurality of states and at least one transition for at least a portion of the plurality of biological components according to said at least one specification; and creating a

visual depiction of said at least a portion of the plurality of biological components in each of said plurality of states.

27. (Withdrawn) The method of claim 26, further comprising: detecting a state of at least one biological component; and creating animation according to said state with said visual depiction.

28. (Withdrawn) The method of claim 27, wherein the biological system comprises a thymus.

29. (Withdrawn) A method for analyzing a biological system, the biological system featuring a plurality of biological components, the method comprising: providing data related to a plurality of activities of the plurality of biological components of the biological system; analyzing the data to form at least one specification ; decomposing said at least one specification into a plurality of events for at least a portion of the plurality of biological components according to said at least one specification; and creating reactive animation of said at least a portion of the plurality of biological components, said reactive animation being at least partially determined according to said plurality of events.

30. (Withdrawn) The method of claim 29, further comprising:

detecting at least one property of the biological system through analyzing said reactive animation.

31. (Withdrawn) A method for analyzing a population having a large number of interacting components, the method comprising: providing data related to a plurality of activities of the population ; analyzing the data to form at least one specification;

decomposing said at least one specification into a plurality of events for at least a portion of the plurality of components according to said at least one specification; and creating reactive animation of said at least a portion of the plurality of components, said reactive animation being at least partially determined according to said plurality of events.

32. (Withdrawn) The method of claim 31, further comprising: detecting at least one property of the population through analyzing said reactive animation.

33. (Withdrawn) A system for at least providing an interface to a control system, the control system featuring a large number of dynamically created, changed and destroyed moving objects, comprising: (a) an event driven engine for modeling the objects according to a plurality of events; (b) an animation engine for creating a visual depiction at least of each of the events ; wherein said event driven engine detects an event associated with the object in the control system, and wherein said animation engine creates said visual depiction according to said event for being provided to the interface.